METHOD FOR FORMING A THIN FILM TRANSISTOR OF AN ORGANIC LIGHT EMITTING DISPLAY

Abstract

A method for forming a thin film transistor of an organic light emitting display includes depositing a first metal layer on a substrate, performing a photo-etching-process (PEP) to form a gate of the TFT on the substrate, forming a gate insulating layer, a microcrystalline silicon layer, an amorphous silicon layer, and a doped n⁺ layer sequentially, and then performing a second PEP to remove a portion of the doped n⁺ layer, the amorphous silicon layer, and the microcrystalline silicon layer. The method further includes forming a second metal layer, performing a third PEP to form a source and a drain on the substrate and to simultaneously remove a portion of the doped n⁺ layer to expose the amorphous silicon layer, and finally, forming a passivation layer on the substrate.